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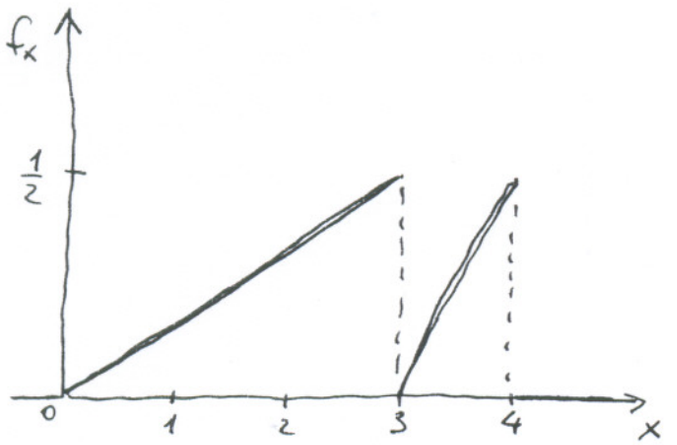
2)

$$F_x(x) = \begin{cases} 0 & x \le 0 \\ \frac{x^2}{12} & 0 \le x \le 3 \\ \frac{3}{4} + \frac{(x-3)^2}{4} & 3 \le x \le 4 \\ 1 & 4 \le x \end{cases}$$

$$f_x(x) = F_x'(x) = \frac{dF_x(x)}{dx}$$

$$f_x(x) = \begin{cases} 0 & x \le 0 \\ \frac{x}{6} & 0 \le x \le 3 \\ \frac{x-3}{2} & 3 \le x \le 4 \\ 0 & 4 \le x \end{cases}$$



$P(X \le 3) = F_x(3) = \frac{3^2}{12} = \frac{9}{12} = \frac{3}{4} = 0.75$

LAHKO TUDI IZ GRAFA $f_x(x)$: PLOŠČINA "LEVEGA" TRIKOTNIKA

$P[X \le 3] = 3 \cdot \frac{1}{2} \cdot \frac{1}{2} = \frac{3}{4}$